1. (Currently Amended) A substrate having a coating thereon, the coating comprising:

an ormosil composite including an organic-inorganic hybrid polymeric matrix and a plurality of inorganic particles of a size of at least one (1) micron entrapped therein.

2. (Original) The substrate of claim 1 wherein substantially all of said plurality of inorganic particles each being not greater than 75 microns in its maximum dimension.

3. (Original) The substrate of claim 1 wherein substantially all of said plurality of inorganic particles each being not greater than 5 microns in its maximum dimension.

4. (Original) The substrate of claim 1 wherein the concentration of said plurality of inorganic particles is between 1% and 90% of the total weight of said ormosil composite.

5. (Original) The substrate of claim 4 wherein the concentration of said plurality of inorganic particles is between 5% and 30% of the total weight of said ormosil composite.

6. (Original) The substrate of claim 1 wherein said ormosil composite coating is of a thickness of between approximately 10 and 26 microns.

7. (Original) The substrate of claim 1 wherein said plurality of inorganic particles are selected from a group consisting of oxides, nitrides, carbides, and carbonitrides.

8. (Original) The substrate of claim 1 wherein said ormosil composite is formed through the hydrolysis and condensation of organically modified silane with an alkoxide precursor.

9. (Original) The substrate of claim 8 wherein said alkoxide precursor is a non transition metal alkoxide.

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10. (Currently Amended) A process for improving the abrasion and corrosion resistance of a metal prone to abrasion and corrosion, comprising:

applying to the metal a coating of an ormosil ~~composite~~ organic-inorganic hybrid polymeric matrix;

~~entrapping~~ wherein a plurality of inorganic particles of a size of at least one micron in maximum dimension are entrapped in said ormosil ~~composite~~ matrix.

11. (Original) The process of claim 10 further including applying said ormosil composite coating in a sol-gel process.

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12. (New) An abrasion and corrosion resistant coating comprising an ormosil composite, said ormosil composite including an organic-inorganic hybrid polymeric matrix and a plurality of inorganic particles of a size of at least one (1) micron entrapped therein.

13. (New) The coating of claim 12 wherein substantially all of said plurality of inorganic particles each being not greater than 75 microns in its maximum dimension.

14. (New) The coating of claim 12 wherein substantially all of said plurality of inorganic particles each being not greater than 5 microns in its maximum dimension.

15. (New) The coating of claim 1 wherein the concentration of said plurality of inorganic particles is between 1% and 90% of the total weight of said ormosil composite.

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16. (New) The coating of claim 15 wherein the concentration of said plurality of inorganic particles is between 5% and 30% of the total weight of said ormosil composite.

17. (New) The coating of claim 12 wherein said ormosil composite coating is of a thickness of between approximately 10 and 26 microns.

18. (New) The coating of claim 12 wherein said plurality of inorganic particles are selected from a group consisting of oxides, nitrides, carbides, and carbonitrides.

19. (New) The coating of claim 12 wherein said ormosil composite is formed through the hydrolysis and condensation of organically modified silane with an alkoxide precursor.